

Remarks

Claims 1-18 are pending in the application. Claims 1-6, 8, 9, 12 and 18 have been rejected under 35 U.S.C. § 102(b). Claims 7, 10, 11, 14-17 have been rejected under 35 U.S.C. § 103(a). In view of the following remarks, reconsideration and withdrawal of these grounds for rejection is requested.

Examiner Interview

The Applicant thanks Examiner Choe for the courtesy of the Interview conducted on November 8, 2004. During the Interview, the Applicant's representative (Darius C. Gambino) and the Examiner discussed the allowability of amended independent claims 1 and 12. The Examiner agreed to consider these claims formally upon the filing of formal response, and thus the present Amendment has been filed.

The Applicant notes for the record that independent claims 1 and 12 have been amended to clarify the fact that the circuit described and claimed in the present application is a "differential" circuit with differential inputs and outputs. Although the term "differential" was used throughout the prior version of claims 1 and 12 (and in several dependent claims), the claims have been amended to clarify this distinction over Japanese Patent JP58-181310 to Sakaguchi, which clearly does not show a differential circuit.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-6, 8, 9, 12 and 18 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Japanese Patent JP58-181310 ("Sakaguchi").

The Examiner has again rejected claims 1-6, 8, 9, 12 under Sakaguchi. However, the circuit shown in Figure 1 of Sakaguchi is structurally and functionally different from the circuit presently claimed. For example, Sakaguchi does not teach or suggest a differential circuit, and does not teach or suggest differential inputs and outputs. Sakaguchi teaches only first and second single pole input terminals 3, 4, first and second control voltage terminals 14, 15, a power supply terminal 12 (e.g., Vcc), and a single output terminal 16 (emphasis added).

Importantly, Sakaguchi is not adapted to transmit a differential signal therethrough (from input to output), as is the circuit described and claimed in the present patent application. The input signals in Sakaguchi are applied to the transistors 1, 2, respectively, and as a result, a single pole output signal is presented at output terminal 16.

The claimed invention comprises a circuit 100 for either transmitting or isolating a differential input signal applied to first and second differential input terminals V_{in+} , V_{in-} (see, page 4, lines 1-10). When the differential signal is transmitted, it appears as an amplified version of the input signal at first and second differential output terminals V_{out+} , V_{out-} , and when the differential signal is isolated it is shunted to ground (see, page 4, lines 1-10).

Claim 1 has been amended to recite:

A switch circuit comprising: a first differential amplifier pair providing a portion of an isolation channel, wherein a first amplifier of the first differential amplifier pair is coupled to a first differential input terminal, and a second amplifier of the first differential amplifier pair is coupled to a second differential input terminal; a second differential amplifier pair providing a portion of a transmit channel, wherein a first amplifier of the second differential amplifier pair is coupled to a first differential output terminal, and a second amplifier of the second differential amplifier pair is coupled to a second differential output terminal; and a third differential amplifier pair providing a control bias for

selecting either the transmit channel or the isolation channel.
[emphasis added].

Thus, claim 1 now recites, in addition to the previously recited elements, “differential input terminal(s)”, and “differential output terminal(s).” Sakaguchi does not disclose, teach or suggest such an invention. Sakaguchi teaches only two single pole input terminals (3, 4), and one single pole output terminal (16). Accordingly, reconsideration and withdrawal of this ground of rejection with respect to claims 1-6, 8, and 9 is respectfully requested.

Independent claim 12 has been amended similar to independent claim 1. Thus, for those same reasons discussed above with reference to claim 1, reconsideration and withdrawal of this ground of rejection with respect to claims 12 and 18 is also respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 7, 10, 11, 14 and 15 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Sakaguchi. All of claims 7, 10, 11, 14 and 15 are dependent upon one of claims 1 or 12. Therefore, for those reasons discussed above, reconsideration and withdrawal of this ground of rejection is also respectfully requested.

Conclusion

In view of the foregoing remarks, Applicants submit that this application is in condition for allowance at an early date, which action is earnestly solicited.

Respectfully submitted,



Paul A. Taufer
Reg. No. 35,703
Darius C. Gambino
Reg. No. 41,472

Piper Rudnick LLP
One Liberty Place
1650 Market Street, Suite 4900
Philadelphia, PA. 19103
Phone: 215.656.3300